

DUAL LOBE, SPLIT RING, VARIABLE ROLLER VANE PUMP

Abstract of the Disclosure

A dual lobe, split ring, variable displacement roller vane pump is provided for supplying an aircraft engine varying amount of fuel. The pump includes a housing having an inlet and an outlet, a rotor rotatably mounted within the housing and having a plurality of slots, and a plurality of roller vane assemblies operatively mounted within the slots. The roller vane assemblies include a shoe or rocker that receives a roller. The rocker is mounted for pivoting movement in the slot whereby large bearing surfaces carry the load. Moreover, the pivoting design of the roller vane assembly provides for a substantial contribution from under vane pump flow.